Storm Water Pollution Prevention Plan

Jackie Gregory Poultry Houses Red Boiling Springs, Tennessee

Prepared For:

Mr. Jackie Gregory, Owner 5368 Galen Road Lafayette, Tennessee 37083



August 2014



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STORM WATER POLLUTION PREVENTION PLAN

SITE DESCRIPTION

Project Name and Location: (Latitude, Longitude, or Address)	Owner Name and Address:
Jackie Gregory Proposed Poultry Houses	Jackie Gregory
Red Boiling Springs, Macon County, Tennessee	5368 Galen Rd
Latitude <u>36° 33' 36.11" N</u> , Longitude <u>85° 50' 52.75" W</u>	Lafayette, Tennessee 37083

Description: (Purpose and Types of Soil Disturbing Activities)

This project will consist of the development of 6.21 acres, which is presently a pasture field with light cover. The project will involve the installation of two 66-ft. x 600-ft. poultry houses. The estimated time of construction beginning is October 2014. See **Appendix A** for a Project Location Map.

The soil disturbing activities will include clearing, grubbing, grading, filling, excavating, and draining operations. The proposed construction site consists of the following types of soils:

- 1. HaD Hawthorne gravelly silt loam, 12 to 25 percent slopes, with a percent of area of interest (AOI) of 18.7%.
- 2. SrC2 Sugargrove gravelly silt loam, 5 to 12 percent slopes, eroded, with a percent of AOI of 81.3%.

A Soil Map and descriptions can be found in Appendix B.

Runoff Coefficient:	The final coefficient of runoff for this phase of construction will be <u>CN=81</u> .
Site Area:	The proposed site disturbance area will be approximately <u>6.21</u> acres
Name of Receiving Waters:	The entire site will drain into an unnamed tributary to Salt Lick Creek, which eventually flows into Barren River.

A summary of Hydraulic Calculations can be found in Appendix C.

Sequence of Major Activities:

The order of activities will be as follows:

- 1. Install silt fence and construction entrance as shown on Storm Water Pollution Prevention Plan.
- 2. Clearing and grubbing of site.
- 3. Strip and stockpile topsoil as necessary.
- 4. Stabilize denuded areas and stockpiles within 15 days of last construction activity in that area.
- 5. Complete grading and install permanent structures and seeding.

- 6. Remove accumulated sediment from silt fence.
- 7. When all construction activity is complete and site is stabilized, remove silt fence and reseed any areas disturbed by its removal.

See Appendix D for a complete Construction Schedule.

CONTROLS

Stabilization Practices

Temporary Stabilization - Topsoil stock piles and disturbed portions of the site where construction activity temporarily ceases for at least 21 days will be stabilized with temporary seed and mulch no later than 15 days from the last construction activity in that area. The temporary seed shall be annual rye or wheat applied at the rate of 150 pounds per acre. Areas of the site, which are to be paved, will be temporarily stabilized by applying stone sub-base until bituminous pavement can be applied.

<u>Permanent Stabilization</u> - Disturbed portions of the site where construction activities permanently cease shall be stabilized with permanent seed no later than 15 days after the last construction activity. The permanent seed mix shall consist of 110 lbs/acre of a mixture containing 55% Kentucky 31 Fescue, 20% English Rye, 15% Korean Lespedeza, and 10% German Millet. Prior to seeding, 4,350 pounds of ground agricultural limestone and 870 pounds of 10-10-10 fertilizer shall be applied to each acre. After seeding, each area shall be mulched with 4,350 pounds per acre of straw. The straw mulch is to be tacked into place by a disk with blades set nearly straight, or by a method approved by the Engineer.

Structural Practices

<u>Silt Fence Barrier</u> - will be constructed along the toe of fill slopes, protecting streams and adjacent property owners.

All erosion and sediment control structures shall comply with the current edition of the <u>Tennessee</u> Erosion and <u>Sediment Control Handbook</u> of the Tennessee Department of Environment and Conservation, dated August 2012.

Storm Water Management

Storm water drainage will be detained by temporary sediment traps for the developed areas. The areas that are not developed will be graded on 2:1 or flatter slopes and stabilized with permanent seeding or plantings.

Additional Site Protection Measures

The unnamed tributary to Salt Lick Creek is located within the Barren River watershed. The "Total Maximum Daily Load" (TMDL) for E.Coli in the Barren River Watershed (HUC 05110002) from

Clay, Jackson, Macon, and Sumner Counties, Tennessee, approved 10/23/2007, establishes the maximum allowable loading of pollutants for a waterbody that will allow the waterbody to maintain water quality standards.

Waste load allocations for NPDES regulated construction activities disturbing one or more acres should be implemented through Best Management Practices (BMPs) as specified by the General NPDES Permit for Stormwater Discharges Associated with Construction Activity.

Please refer to the Site Plan on Page 8 for details and to the remaining documents in this Plan for specifications and illustrations of all other BMPs.

OTHER CONTROLS

Waste Disposal

Waste Materials

All waste materials will be collected and stored in a securely maintained area or in roll-off waste containers. Contractor will contract with a licensed hauler to remove material and transport to a permitted landfill or transfer station weekly.

Hazardous Waste

All hazardous waste materials will be disposed of in the manner specified by local or State regulation or by the manufacturer. Site personnel will be instructed in these practices and the Contractor's superintendent(s) will be responsible for seeing that these practices are followed.

Sanitary Waste

All sanitary waste will be collected from the portable units a minimum of three times per week by a licensed sanitary waste management contractor, which will be contracted by the Design/Builder Contractor.

Offsite Vehicle Tracking

A stabilized construction entrance shall be provided to help reduce vehicle tracking of sediments. The paved street adjacent to the site entrance will be swept daily to remove any excess mud, dirt or rock tracked from the site. Dump trucks hauling material from the construction site will be covered with tarpaulins.

TIMING OF CONTROLS/MEASURES

Areas where construction activity temporarily ceases for more than 21 days will be stabilized with a temporary seed and mulch within 15 days of the last disturbance. Once construction activity ceases permanently in an area, that area will be stabilized with permanent seed and mulch. After the entire site is stabilized, the accumulated sediment will be removed from the trap.

CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS

The Storm Water Pollution Prevention Plan reflects the Owner's requirements for storm water management and erosion and sediment control. To ensure compliance, this plan was prepared in accordance with the current edition of the <u>Tennessee Erosion and Sediment Control Handbook</u> of the Tennessee Department of Environment and Conservation, dated August 2012.

MAINTENANCE/INSPECTION PROCEDURES

Inspection and Maintenance Practices

These are the inspection and maintenance practices that will be used to maintain erosion prevention and sediment controls as applicable.

- Less than one half of the site will be denuded at one time.
- A rainfall gauge is required on the construction site. It should be read at least once a day at approximately the same time to get a 24 hour rainfall depth total, recorded in the rainfall log, and kept with the onsite storm water plan.
- All control measures will be inspected twice weekly at three-day intervals, before anticipated storm events expected to cause a significant amount of runoff, and within 24 hours of the end of any storm that produces 0.5 inches or more rainfall, or 0.25 inches of rainfall in 15 minutes at the site.
- Discharge locations or points shall be inspected to ascertain whether erosion control measures are effective.
- Locations where vehicles exit the site shall be inspected for evidence of offsite sediment tracking.
- All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of report.
- Built up sediment will be removed from silt fence when it has reached one-half the height of the fence.
- Silt fence will be inspected for depth of sediment, tears, security of attachment to the fence posts, and to see that the fence posts are firmly in the ground.
- Diversion dike will be inspected and any breaches promptly repaired.
- Temporary and permanent seeding and planting will be inspected for bare spots, washouts, and healthy growth.
- A maintenance inspection report will be made after each inspection and furnished to Engineer within 24 hours of inspection. A copy of the report forms are found in Appendix F of this Plan.

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• The Contractor will be responsible for inspections, maintenance and repair activities, and filling out the inspection and maintenance reports.

Non-Storm Water Discharges

The Project will not provide non-storm water discharges from the site during the construction period.

INVENTORY FOR POLLUTION PREVENTION PLAN

The materials or substances listed below are expected to be present onsite during construction:

- Concrete
- Fertilizers
- Masonry Block
- Petroleum Based Products
- Wood

SPILL PREVENTION

Material Management Practices

The following material management practices will be used to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff:

Good Housekeeping:

The following good housekeeping practices will be followed onsite during the construction project:

- An effort will be made to store only enough products required to do the job.
- All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure such as a wire fence.
- Products will be kept in their original containers with the original manufacturer's label.
- Substances will not be mixed with one another unless recommended by the manufacturer.
- Whenever possible, all of a product will be used before disposing of the container.
- Manufacturers' recommendations for proper use and disposal will be followed.
- Keep dumpsters covered to prevent trash from being blown out and into the stormwater system.

 The site superintendent will inspect daily to ensure proper use and disposal of materials onsite.

Hazardous Products:

These practices are used to reduce the risks associated with hazardous materials:

- Hazardous waste shall be placed in closed containers and shall be shielded adequately to prevent dispersion of the waste by wind or water.
- Non-Hazardous waste shall be stored in containers separate from hazardous waste storage areas.
- Products will be kept in original containers unless they are not able to be resealed.
- Original labels and material safety data will be retained; they contain important product information.
- If surplus product must be disposed of, manufacturers' or local and State recommended methods for proper disposal will be followed.

Product Specific Practices

The following product specific practices will be followed onsite:

Petroleum Products:

All onsite vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Drip pans will be installed under any leaky equipment, and materials in those pans should be collected and taken offsite for proper disposal. Lubricants, solvents and fuels will be stored in tightly sealed containers, which are clearly labeled, and placed in a covered area. Any asphalt substances used onsite will be applied according to the manufacturer's recommendations.

Fertilizers:

Fertilizers will be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked into the soil to limit exposure to storm water. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

Paints: (Not applicable)

All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewer system but will be properly disposed of according to manufacturers' instructions and State and local regulations.

Concrete Trucks:

Concrete trucks will not be allowed to wash out or discharge surplus concrete or drum wash water on the site except in designated temporary sediment collection areas constructed for such purposes by the Contractor.

SPILL CONTROL PRACTICES

In addition to the good housekeeping and material management practices discussed in the previous sections, the following practices will be followed for spill prevention and cleanup:

- Manufacturers' recommended methods for spill cleanup will be clearly posted and site
 personnel will be made aware of the procedures and the location of the information and
 cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite. Equipment and materials will include but not limited to brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for this purpose.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- Spills, regardless of size, of toxic or hazardous material will be reported to the appropriate State or local government agency.
- In the event that an oil spill or chemical release occurs during the performance of this contract, the Contractor is required to contact the National Response Center, telephone number 1-800-424-8802 as soon as possible. The Contractor shall comply with any instructions from the responding agency concerning containment and/or cleanup of the spill.
- In the event of a spill, the spill prevention plan will be adjusted to include measures to prevent this type of spill from reoccurring and how to clean up the spill if there is another one. A description of the spill, what cause it, and the cleanup measures will also be included.
- The Contractor's superintendent(s), responsible for the day-to-day site operations, will be the spill prevention and cleanup coordinator. He will designate at least three other site personnel who will receive spill prevention and cleanup training. These individuals will each become responsible for a particular phase of prevention and cleanup. The names of responsible spill personnel will be posted in the material storage area and in the office trailer onsite.

See Enclosed Plans

STORMWATER POLLUTION PREVENTION PLAN CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signed: Jackie Gregory, Owner

Date: 8-7-14

CONTRACTOR'S CERTIFICATION

I certify under penalty of law that I have reviewed this document, any attachments, and the SWPPP referenced above. Based on my inquiry of the construction site owner/developer identified above and/or my inquiry of the person directly responsible for assembling this NOI and SWPPP, I believe the information submitted is accurate. I am aware that this NOI, if approved, makes the above-described construction activity subject to NPDES permit number TNR100000, and that certain of my activities on-site are thereby regulated. I am aware that there are significant penalties, including the possibility of fine and imprisonment for knowing violations, and for failure to comply with these permit requirements.

$\underline{\mathbf{Signature}}$	$\underline{\mathbf{For}}$	Responsible for
(Name & Title)		General Contractor
(Name & Title)		General Contractor
(Name & Title)		General Contractor